

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 300471WD/KCS/erw	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/IB 02/ 03611	International filing date (day/month/year) 03/09/2002	(Earliest) Priority Date (day/month/year)
Applicant NOKIA CORPORATION		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (see Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☒ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

5

☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PC 02/03611

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04B1/707

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04B H04L H04Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, WPI Data, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 01 01595 A (ERICSSON INC) 4 January 2001 (2001-01-04) page 12, line 3 -page 16, line 22 page 18, line 1 - line 2; claims 1-14; figure 5	1-30
Y	--- US 5 559 829 A (OLIVIER RENE ET AL) 24 September 1996 (1996-09-24) column 2, line 25 - line 65 abstract --- -/--	1-30

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

25 April 2003

Date of mailing of the international search report

19. 05. 2003

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PEDER GJERVALDSAETER/J

INTERNATIONAL SEARCH REPORT

International Application No

PC 02/03611

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	PURSLEY M B ET AL: "Evaluation of correlation parameters for periodic sequences" IEEE TRANSACTIONS ON INFORMATION THEORY, JULY 1977, USA, vol. IT-23, no. 4, pages 508-513, XP002239316 ISSN: 0018-9448 Section II abstract ---	1-30
A	WO 02 052743 A (URABE KENZO ;ERICSSON INC (US); BOTTOMLEY GREGORY EDWARD (US); WAN) 4 July 2002 (2002-07-04) page 19, line 13 - line 19 abstract; figure 5 ---	1-30
A	BOON KIONG KOK ET AL: "Effects of spreading chip waveform pulse-shaping on the performance of DS-CDMA indoor radio personal communication systems in a frequency-selective Rician fading channel" ISCE '97. PROCEEDINGS OF 1997 IEEE INTERNATIONAL SYMPOSIUM ON CONSUMER ELECTRONICS (CAT. NO.97TH8348), ISCE '97. PROCEEDINGS OF 1997 IEEE INTERNATIONAL SYMPOSIUM ON CONSUMER ELECTRONICS, SINGAPORE, 2-4 DEC. 1997, pages 198-201, XP002239317 1997, New York, NY, USA, IEEE, USA ISBN: 0-7803-4371-9 Section 5.2 ---	1-30
A	SCHOTTEN H D: "New non-linear families of code-sequences with correlation properties better than linear families" MILCOM 95. UNIVERSAL COMMUNICATIONS. CONFERENCE RECORD (CAT. NO.95CH35750), PROCEEDINGS OF MILCOM 95, SAN DIEGO, CA, USA, 5-8 NOV. 1995, pages 378-382 vol.1, XP002239318 1995, New York, NY, USA, IEEE, USA ISBN: 0-7803-2489-7 Chapter 2.1,2.2 abstract ---	1-30

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INTERNATIONAL SEARCH REPORT

International Application No
PC 02/03611

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>STANCZAK S ET AL: "Influence of periodic correlation properties of sequences on the sum capacity of CDMA systems" CONFERENCE RECORD OF THE THIRTY-FOURTH ASILOMAR CONFERENCE ON SIGNALS, SYSTEMS AND COMPUTERS (CAT. NO.00CH37154), CONFERENCE RECORD OF THE THIRTY-FOURTH ASILOMAR CONFERENCE ON SIGNALS, SYSTEMS AND COMPUTERS, PACIFIC GROVE, CA, USA, 29 OCT.-1 NOV. 200, pages 1288-1292 vol.2, XP002239319 2000, Piscataway, NJ, USA, IEEE, USA ISBN: 0-7803-6514-3 the whole document -----</p>	1-30

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PC 02/03611

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0101595	A	04-01-2001	AU 4998900 A	31-01-2001
			CN 1371551 T	25-09-2002
			EP 1197007 A1	17-04-2002
			JP 2003503879 T	28-01-2003
			WO 0101595 A1	04-01-2001

US 5559829	A	24-09-1996	FR 2712444 A1	19-05-1995
			AU 683694 B2	20-11-1997
			AU 7752994 A	18-05-1995
			CA 2135459 A1	11-05-1995
			CN 1124439 A	12-06-1996
			EP 0652647 A1	10-05-1995
			FI 945230 A	11-05-1995
			JP 7202752 A	04-08-1995
			NZ 264805 A	26-11-1996

WO 02052743	A	04-07-2002	US 2001028677 A1	11-10-2001
			WO 02052743 A2	04-07-2002
